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EXAMINER

WARD, AARON S

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 08/10/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

10/084,538

Applicant(s)

ICHIKAWA, HIROTOSHI

Examiner

Aaron S. Ward

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-7, 9-12, 14-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (already of record) in view of Shirakawa.

As to claim 1, Wright et al. teaches a mobile terminal apparatus including a first body 10, 12 (Figure 1) and a second body (not labeled) pivotably coupled thereto. The mobile terminal has an image display section 16 comprising an image display device 22 (Figure 5), a magnifying optical part 24 and an observation window 28 which projects from a side of one surface of the first body 10, 12 and leads the image outside. The bodies pivot between open/closed such that in the closed position the second body partially covers the surface of the first, and the observation window 28 is visible unobstructed from outside. Wright et al. teaches an operation section (Figure 1; numeric keypad, not labeled) on the first body 10, 12, and a display section 10 having lower resolution than image display section 16. The observation window 28 (Figure 5) of the image display section 16 is disposed to face outside when the first and second bodies are closed.

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Wright et al. does not teach at least one pointing device that faces outside when the bodies are in the closed position. Wright et al. does not teach that the display section 10 is provided on the second body.

Regarding the pointing device, Shirakawa teaches a mobile terminal having first and second bodies pivotably supported and including at least one pointing device 13, 23, 26 (Figures 1A and 1B) disposed so as to face toward the outside when the first and second bodies are closed.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Shirakawa with that of Wright et al. to provide the convenience of scrolling information programmed within the Wright et al. mobile terminal while it was closed, as taught by Shirakawa (column 2, line 57 – column 3, line 7).

Regarding the location of the lower resolution display 10, it is an obvious design choice to locate the display 10 on the second body (as evidence, e.g., by previously cited Jachimowicz et al. which teaches a hi/low resolution display on first/second pivotable bodies, respectively). Such design choice would be obvious to one of ordinary skill in the art because locating the display on the second pivotable body of Wright et al. would provide more design space for a larger display. One of ordinary skill in the art would be motivated to make the combination because the low resolution of the display benefits from a larger space for its location in order to fit more information due to the screen's lower resolution.

As to claim 11, Wright et al. teaches a mobile terminal apparatus including a first body 10, 12 (Figure 1) and a second body (not labeled) pivotably coupled thereto. The mobile terminal has an image display section 16 comprising an image display device 22

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(Figure 5), a magnifying optical part 24 and an observation window 28 which projects from a side of one surface of the first body 10, 12 and leads the image outside. The bodies pivot between open/closed such that in the closed position the second body partially covers the surface of the first, and the observation window 28 is visible unobstructed from outside. Wright et al. teaches an operation section (Figure 1; ear speaker, not labeled) on the second body (i.e., the operation section operates to process audio signals to produce sound for operating the mobile apparatus), and a display section 10 on the first body having lower resolution than image display section 16. The observation window 28 (Figure 5) of the image display section 16 is disposed to face outside when the first and second bodies are closed.

Wright et al. does not teach at least one pointing device that faces outside when the bodies are in the closed position.

Shirakawa teaches a mobile terminal having first and second bodies pivotably supported and including at least one pointing device 13, 23, 26 (Figures 1A and 1B) disposed so as to face toward the outside when the first and second bodies are closed.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Shirakawa with that of Wright et al. to provide the convenience of scrolling information programmed within the Wright et al. mobile terminal while it was closed, as taught by Shirakawa (column 2, line 57 – column 3, line 7).

As to claims 2 and 12, Wright et al. teaches that the image display section 16 is built in at least one of the first body 10, 12 and the second body.

As to claims 4 and 14, Shirakawa teaches that the pointing device 13 (Figure 1A) is disposed on the back surface of the first body 11.

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As to claims 5 and 15, Shirakawa teaches that the pointing device (Figure 3A; non-labeled elongated circle corresponding to the pointing device 13 of Figure 1A) is disposed on the back surface of the second body 42 (Figure 3B).

As to claims 6 and 16, Shirakawa teaches that the pointing device (Figure 3A) has a main operation member 47 and a subordinate operation member (Figure 3A) on the back surface of the second body 42 (Figure 3B), and a connecting member (Figure 3B), which connects the subordinate and main operation members interlocked with each other.

As to claims 7 and 17, Shirakawa teaches side surfaces of the first and second bodies, and that the pointing device 23 (Figure 1A) is disposed on the side surface of the first or second body.

As to claims 9 and 19, Wright et al. teaches that the magnifying optical part 24 has a free shaped surface optical device 28 (Figure 5).

As to claims 10 and 20, Wright et al. teaches that the magnifying optical part 24 has a free shaped surface prism 24 (Figure 5).

As to claim 21, Wright et al. teaches a mobile terminal apparatus including a first body 10, 12 (Figure 1) and a second body (not labeled) pivotably supported thereon. The mobile terminal has an image display section 16 comprising an image display device 22 (Figure 5), a magnifying optical part 24 and an observation window 28 which projects from a side of one surface of the first body 10, 12 and leads the image outside. The bodies pivot between open/closed such that in the closed position the second body partially covers the surface of the first, and the observation window 28 is visible unobstructed from outside. The observation window 28 (Figure 5) of the image display section 16 is disposed to face outside when the first and second bodies are closed.

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Wright et al. does not teach at least one pointing device that faces outside when the bodies are in the closed position.

Regarding the pointing device, Shirakawa teaches a mobile terminal having first and second bodies pivotably supported and including at least one pointing device 13, 23, 26 (Figures 1A and 1B) disposed so as to face toward the outside when the first and second bodies are closed.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Shirakawa with that of Wright et al. to provide the convenience of scrolling information programmed within the Wright et al. mobile terminal while it was closed, as taught by Shirakawa (column 2, line 57 – column 3, line 7).

As to claim 22, Wright et al. teaches a mobile terminal apparatus including a first body 10, 12 (Figure 1) and a second body (not labeled) pivotably supported thereon. The mobile terminal has an image display section 16 comprising an image display device 22 (Figure 5), a magnifying optical part 24, an observation projection 31 projected from a surface of the first body 10, 12 and covering the magnifying optical part 24, and an observation window 28 which is provided on a projected surface of the observation projection 31 to project from the surface of the first body 10, 12 and leads the image outside. The bodies pivot between open/closed such that in the closed position the second body partially covers the surface of the first, and the observation window 28 is visible unobstructed from outside. Wright et al. teaches pointing device (Figure 1; numeric keypad, not labeled; it is known in the art to utilize the numeric keypad to control a cursor as a pointing device). The observation window 28 (Figure 5) of the

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image display section 16 is disposed to face outside when the first and second bodies are closed.

Wright et al. does not teach that the at least one pointing device faces outside when the bodies are in the closed position.

Regarding the pointing device, Shirakawa teaches a mobile terminal having first and second bodies pivotably supported and including at least one pointing device 13, 23, 26 (Figures 1A and 1B) disposed so as to face toward the outside when the first and second bodies are closed.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Shirakawa with that of Wright et al. to provide the convenience of scrolling information programmed within the Wright et al. mobile terminal while it was closed, as taught by Shirakawa (column 2, line 57 – column 3, line 7).

3. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. and Shirakawa as applied to claims 1 and 11 above, and further in view of Song et al.

Wright et al. and Shirakawa teach the claimed mobile terminal, but do not teach that the image display section is detachably supported.

Song et al. teaches a mobile terminal 10 (Figure 1A) having an image display section 12 detachably supported.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Song et al. with that of Wright et al. and Shirakawa for the convenience of providing a hand-held visual display as taught by Song et al.

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4. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. and Shirakawa as applied to claim 11 above, and further in view of Iwata et al.

Wright et al. and Shirakawa teach the claimed mobile terminal, but do not teach an opening going through the second body.

Iwata et al. teaches a mobile terminal 1 (Figures 19-20) having a first body 1 and a second body 7. The first body 1 has an observation window 20 on its front surface. The second body 7 has an opening 65 (column 22, lines 55-60 describe opening 65 constructed by cutting-out body 7) through its front surface to its back surface, which opposes the observation window 20, and the observation window 20 faces outside from the opening 65, when the bodies are closed.

It would have been obvious for one of ordinary skill in the art to combine the teaching of Iwata et al. with that of Wright et al. and Shirakawa to provide the convenience of viewing the user interface while the bodies are closed for durability as taught by Iwata et al.

Response to Arguments

5. Applicant's arguments filed June 2, 2004 have been fully considered but they are not persuasive.

Regarding claims 1, 11, 21 and 22, Applicant indicates that Wright et al. does not teach that "the observation window projects from a side of one surface of the first body." The Office respectfully disagrees. Although the virtual image display of Wright et al. is

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capable of being "popped up," it does in fact project such that the observation window 28 projects from a side of the first body, as specifically illustrated in Fig. 5 of Wright et al.

Regarding claim 22 specifically, Wright et al. teaches an observation projection 31 (Fig. 5) projected from the first body and covering the magnifying optical part 24.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

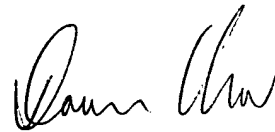
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron S. Ward whose telephone number is (703) 305-8992. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on (703) 305-9720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ASW



DENNIS-DOON CHOW
PRIMARY EXAMINER